

Patent Claims

1. Process for the production of a glass melt,
 - 1.1 with a melting stage;
 - 1.2 with a refining stage,
 - 1.3 with a homogenizing and conditioning stage:
 - 1.4 in which before the homogenizing and conditioning stage the melt is heated to a temperature of over 1700 °C;
 - 1.5 in which polyvalent ions are present in proportion of at least 0.5 % by wt.
2. Process according to claim 1, characterized in that the temperature lies between 2100 and 2400 °C.
3. Process according to claim 1, characterized in that the temperature lies above 2400 °C.
4. Process according to one of claims 1 to 3, characterized in that the temperature in the refining stage lies at one of the values mentioned in claims 1 to 3.
5. Process according to one of claims 1 to 4, characterized in that the melt contains polyvalent ions of one of the following elements, or a combination of two or more of these elements:

Vanadium, cerium zinc, tin, titanium, ion, molybdenum, europium, manganese, nickel.

6. Process according to one of claims 1 to 5, characterized in that the melt is free from toxic refining agents.
7. Process according to one of claims 1 to 6, characterized in that the melt is heated by means of high frequency energy and is present in a cooled Skull crucible.